285 basket made of tules was called a´nas, while an openwork one for fish also was called čotot. A stiff willow basket for seed-beating was called čama´l. All these were twined. The informant J.A. said that both coiling and twining were done by Chunut, Telamni, and Wolasi, but the technique used depended largely on the materials available. Two typical Yokuts shapes, the shouldered or bottleneck basket and the large conical burden basket, were obtained mostly by trade. The shapes which she knew and named were as follows. The circular coiled winnowing tray (tsa´pːt) and a larger, flatter tray for gambling (tai´´iwan). Two small basket types have incurved tops, one (po´mːk) has a simple curved side, the other (tsot pomːk) a flared straight side which eventually curves inward at the neck. The bottleneck basket (o´sa) was known but seldom used. The large burden basket (anas) was bought from the foothill people. The seedbeater (ha´lai) was handled. The basket cap (pukiu´was) was known to have been used in the old days, but was not an addiction as it was with women of northern California.

[482] The tumpline (tsono´lhi) and carrying net (tsuno´lus) were known to J.A., but she did not know how to make them.

The Telamni informant, T.W., whose home had been among Telamni in contact with the Wukchumni and Gawia more than with the Chunut and Tachi, described Telamni baskets as follows. Coiled types were the coiled winnowing and gambling trays (kayo´to); a large, flat-bottomed, flaring-sided basket used for cooked mush and given as a gift basket (kotčao´); and the shouldered or bottleneck basket (osa). The twined baskets were the large conical burden basket (a´ñaš); the oval, handled seedbeater (ča´´aiči); and the large, somewhat globular, cooking basket decorated with bands of red (po´dano).

The tumpline she called šu´nlːk, the soaproot brush ṭoho´ṭ.

Blanketmaking

286 The Tachi made blankets (woi´yon, the word used for mats) of strips of mudhen skins. Rabbits were scarce in the tular, consequently blankets of their skins were obtained only by trade. The chief source was the Wimilchi tribe living up Kings River out of the tular area.

Nevertheless, rabbitskin blankets were made by the Tachi, according to Jeff Mayfield. He describes the process as a kind of looping or netting, not weaving. Variations of the blanket were used as shawls, skirts, blankets, and baby covers.[47]

[Text continues p. 214]

[47] Latta, Uncle Jeff's Story, 33. It is possible that the lake people with whom Mayfield spent his time were Wimilchi and Mutunutu at the lake sloughs rather than the Tachi proper.

291 available. Large tules were pulled into strips;
they and whole small tules were pounded with a
286 wooden stick on rock (usually the bedrock
mortar where good working space was provided)
until softened and pliable. Any of these
materials, when made into aprons, was twined
along one edge with willowbark string (ša').
One row of twining held the fibres together; a
second, below the first, included the bent-over
ends which had been turned down on the outside.
Both rows of twining continued into a twisted
two-strand belt. When asked why two aprons
were made rather than one continuous skirt, M.L.
said the back "wore out too fast"; hence the
replaceable sections.

292 On dress occasions aprons of deerskin
(ki'nɨp) were worn, sometimes put on over the
fibre aprons (fig. 8, b). The front apron of
deerskin was edged with deer hoofs which
rattled prettily. Not all women could afford
these. M.L. spoke proudly of having such an
apron which her mother had made for her first
puberty ceremony. Women whose husbands were
poor hunters or had other vocations bought
deerskin and hoofs for themselves.

291 The basket cap (waki'ñuts) was always
285 coiled, of a shape similar to the small in-
dividual mush basket. It was used only when
[482] carrying a heavy load with the tumpline (M.P.).
While the cap is said to have been invariably
coiled, a museum specimen (U.C. 1/2958; no
provenience other than Yokuts) is a small, di-
agonally twined "bowl" (7-1/2"x 8" diameter at
rim, 4-3/4" deep), palpably old and undoubtedly
a cap. Its rim is bound with buckskin and is
patched with buckskin at a point where a
tumpline would have worn it. It is patterned
with a wide band of double zigzag at the edge
and a band of single zigzag near the base.
There is no other piece like it in the Yokuts
collection and it is presumably introduced from
an outside source, possibly Miwok or Pomo. The
attempt to preserve it by repair even suggests
that it might have been valued because of its
oddity among the Yokuts.

301 Ear ornaments (po') were differentiated
from men's only by having two long strands of
beads added; they were then called yau'wakan.

302 Women's hair was long save during the
[765] period of active mourning, when it was singed
close to the head if grief were deep, to the
shoulders for a lesser bereavement. Like men's
it was parted in the middle and, at work, was
tied at the nape of the neck, but the front
hair was usually singed off to form bangs. Both
sexes washed the hair with soaproot suds and
brushed it with soaproot brushes.

[237 On special occasions eagle down was stuck
381] on the bangs and fore hair with soaproot glue.
An ornamental headband (hoči'n) worn by women
292 was woven of fine milkweed string by the usual
"sewing" technique for belts and had beads in-
troduced to form a diagonal pattern. The band
was 2 to 3 inches wide, long enough almost to

226 poisons: [illegible]ye nuts ground with earth, and
278 crushed nademe leaves.[184] As the large fish became stupefied, men "gigged" them, while the women secured the smaller fish in baskets.[185]

226 Diving for fish was an indulgence of an
481 able swimmer. Such a man (J.P. was said by all who knew him to be an expert at this) would swim down under water fifteen to twenty feet and seize an unwary fish in his hand. If possible a handful of sand was taken along or grabbed off the bottom to aid in holding the slippery fish, but an expert thrust his thumb under the gills. It took much practice to do this, and the skill is better regarded as a pleasurable stunt than as a fishing method.

FOODS, UTENSILS, MEDICINES

Meals and Foods

264 Three meals a day, breakfast (wa´ad),
262 lunch (ču´ka), and supper (do´ñtau) were designated by M.L., but other informants (M. and J.P., S.G., etc.) say there were only two. Certainly two fit the general aboriginal pattern better, as known here and elsewhere. Breakfast consisted of hot acorn mush and a little meat. Everyone of any character was up before sunrise, the breakfast was eaten at about that time. The evening meal was much larger and had added to the staple mush and meat such extras as the day provided--"greens," fish, pigeons, seed cakes, and so on. The evening meal was taken just before sundown. Both men and women had "snacks" during the day; children ate as often as they pleased; this may be a continuance of the unregulated nursing pattern.

262 Generalizing about food habits, M.L. said that the Tachi did not like deer meat, that the Wukchumni did not eat larvae although "people up north" (Hoshima) did, and that the Waksachi all ate bear.[186] Coyote and fox were not eaten but wildcat and raccoon were considered very good, as were squirrels, woodrats, quail, doves, and pigeons. Some persons, amongst those whose totemic tabus permitted it, ate bear and cougar, but most people looked askance at bear meat. For instance, S.G., having no prohibitions to prevent it, once ate bear meat which was cooked rather rare. Directly he ate it, he felt nauseated and vomited the food; he maintained that this would never have happened with any other kind of meat. As for cougar meat, chiefs never touched it because this animal had been a chief in the mythical prehuman era.

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[184] Handbook, 529.

[185] Fish were never put in burden baskets as the moisture softened the soaproot stiffening.

[186] Deer meat was scarce for the lake people; other informants show that the Wukchumni did eat larvae; and certain Waksachi would have died rather than eat bear meat.

202 The mass of crushed fruit was placed in a sieve
262 basket over a large watertight coiled basket and water was slowly poured through. When sufficient liquor resulted, it was poured out of the under receptacle and again put through the berries; this might be repeated two or three times.[190] If kawa seeds were to be added, this was done after the liquor had been drained for the last time. The drink was greatly enjoyed, particularly as it was available during the hottest summer weather. Usually it soured in twelve hours; in colder weather it might keep up to forty-eight but, as M.P. said, this seldom happened, "people drank it up too fast." It was always made up fresh as the soured liquor was not considered fit to drink.

Firewood

313 Trees and limbs for firewood, as well as for house poles and ramadas, were felled and severed by firing. A hole was dug around the base of the selected tree and filled with dry grass and chips. Oak sticks were kindled as torches and applied to the base of the chosen tree while the fire surrounding it was burning. Several of these torches were used, and as the tree began to burn they were pushed and wedged into the burning trunk. The flames were beaten back from the upper trunk. Usually two men worked together, a man and his son often undertaking the job, one to rekindle the sticks as they went out, as they often did, the other to adjust those at the tree trunk and to knock away charred parts of the tree. The workers took care not to look up the tree; if they did, the fire would creep up the trunk. When the tree finally collapsed, the main branches were severed by the same means, as were other parts that could not be broken into portable lengths.

Felling or severing limbs by fire was best done on dead or already fallen trees, but since these were not always obtainable, live trees were attacked in winter when they were drier and there was less danger of brush and grass fire. Old trees were easier to fire than young ones. Both men and women packed wood, but only men did the firing.

313 The load of wood was held on the back by
482 means of a tumpline. This passed over the upper forehead -- if a woman was the carrier, across the chest, if a man -- and extended down the back under the wood and out and back over the load, each end returning over each shoulder to be grasped in the hand (fig. 13, vignettes). Long poles were dragged home with ropes of willow fibre (ho') by men. Ordinarily each family provided its own firewood; a felled tree belonged to the men doing the work. At the time of a big gathering the messengers got wood in the same way.

[190] The Miwok used a similar method but evidently added no flavoring seeds (Barrett and Gifford, 161-162).

412 nobby upper end by capping it with boiled soaproot and tying over this a piece of buckskin.
322 Weights were never added.

The soaproot brush (ǒ·ne ʔō·l) varied in size from small ones some 4 inches long to large ones of 9 inches.[192] They were used variously for brushing up meal when preparing foodstuffs, or for brushing the hair. Hairbrushes were large and made of coarse fibres which have hook-like tips. One in a family was sufficient. The root to make a brush was dug after the flower had faded when the fibres around the root had reached a maximum toughness. The plant's top was torn off and the fibres carefully removed from around the bulb. The bulb was boiled in water until it became a plastic cream-colored mass. The fibres having been arranged as a brush and so tied, the bulb mass was pressed and shaped over the end as a handle and tied in place with several wrappings of string. The liquid from the bulb was viscous and was applied to burden baskets and cradles, where it dried as a practically colorless stiffener.

[302]

[314]

The set of rock lifters consisted of a pair of straight sticks and a looped one. The looped lifter, commonly called mushstirrer because one must necessarily stir about in the mush to find the cooking stones, was made of a peeled withelike stick, heated over coals and then bent around the foot to form a loop. The double handle thus formed was tied with a milkweed string or with a thong (see pl. 1, right verticals). Wild grapevine withes were used for a light type of lifter which was peeled, looped, and tied while still green and flexible. Two sticks from Drum Valley are made of bent young oak and, according to the collector's notes, are tied with the inner bark of oak.[193] Although these looped sticks were used to extract cooking stones from food which was being boiled, the hot stones were lifted in with a pair of pine sticks flattened out at one end. As these were often charred they were not allowed to touch the food, and hot rocks to which ashes clung were dipped in water on their way into the food. The best hot-rock lifters were of pine and were bought from the Eastern Mono, who made them for trade. A medium-sized basket (8 to 12 inches in diameter) of simple flaring type was considered a suitable payment in return.

415

[439]

285 The "set" of baskets comprised six types
482 essential for food-gathering, preparation, and cooking. (See figs. 2 and 3.) The large conical burden basket (a ʔnaš) was of split willow. It was diagonally twined, of close work, and was stiffened with soaproot liquor. Because of

[192] Those collected by Dr. Barrett and now in the University of California Museum of Anthropology.

[193] University of California, Museum of Anthropology, nos. 1-10846, 1-10848; Dr. S.A. Barrett, collector; cf. Kroeber, Handbook, fig. 38.

285 482 the soluble stiffening nothing wet was ever put in it. The apex of the basket was protected with a piece of buckskin sewed on like a patch. Loops to which a tumpline was attached usually hung from the inside about one-third of the way down the sides; sometimes they were on the outside. The burden basket was used primarily for collecting seeds and acorns or other vegetable materials and was kept very clean. Joints of meat, dirty roots, fagots, or pottery clay (wrapped in buckskin) were carried in the carrying net. (The carrying net was primarily a man's possession. They were made by men and sold to women. Women could make them and also were free to use them when available.) A kind of companion piece to the burden basket was the seed-beater (yama´ki). This was a handled scoop of fine openwork twine. When used as a [222] beater the burden basket was held beneath the beaten plant tops to catch the seeds; another method, preferred when possible, was to keep the burden basket on the back, knock plant heads or seeds into the scoop-shaped beater which was then cast back over the left shoulder so the seeds fell in the burden basket. Another type of collecting basket was a large, oval, very openwork twine scoop (a´pot) for carrying fish; smaller ones of the same construction were used to catch fish in the water. Two baskets used in the preparation of food were the coiled winnowing tray (koyo´ṭo) and the sieve (ta´myuk) which was of fine openwork twining; it was very like the seed-beater but lacked a handle. The cooking basket (pota´na) 285 was invariably of twined weave, coarse and 415 close, and had four horizontal bands of redbud worked in a plain or herringbone pattern. All these baskets were essential. Naturally, more than one, and varieties of size or coarseness, were desired even among these six types. Another basket for food was a large flaring basket (kača´o) of coiled technique in which cooked mush was stored, or other cooked foods; it was also watertight so that water for cooking or washing might be put in it. Small coiled serving baskets (also called kačao) with flat bottoms and flaring sides were used as individual eating baskets for each member of the family.

285 Additional baskets, which every woman might not own, were the coiled basket cap (waki´n:ts) used only under the tumpline, the large, flat, handsomely patterned coiled gambling tray (tai´'iwan), and the shouldered ornamental basket (a´ma) which was used by both sexes for the storing of treasures and cherished as a treasure in itself.

323 Not every woman owned pottery cooking 415 vessels (ki´w:c) but all did who could make or afford them among the Central Foothill tribes. Most housewives wanted two large ones for boiling meat and fish and a few smaller dishes for keeping or serving food. Children were not allowed to eat from pottery dishes.

283 rocks without being allowed to dry, and pounded with a stone, then rolled on the thigh into a two-ply cord (see Michahai-Waksachi, Pt. II, for fuller account of method). Making of cordage was a man's task throughout (M.L.).

A medium-weight cord was made of milkweed (ša'). It was used for wide carrying bands, tying cords, fish and duck nets, trap strings. Its manufacture is described by Kroeber for the Yokuts generally.[199]

[824] The commonest string material was milkweed, Asclepias, called shah or chaka. The stems were collected in early winter, the bark or covering peeled off, and shredded by rubbing between the hands. The thin epidermis was then removed by drawing the mass of fibers over a stick. The fibers were not separately disentangled, but loosely rolled together as they adhered. Two of these rolls were then twisted tight, on themselves as well as on each other, by rolling on the thigh with the spit-into hand, the other hand holding and feeding the loose ends. The exact process of adding further material is not known; it consisted probably of rubbing together the ends of a mass of fiber, perhaps with some twist. String was two-ply.

[824] Another and finest string (čitːk) was made of hemp or dogbane. This was used for the ordinary narrow tumpline, carrying and head nets, belts, bead stringing. M.L. said ho' was willow, ša', milkweed, and čitːk, nettle. Neither the "hemp" nor "nettle" was identified by the recorder.

● 482 The carrying net (waˊdak) and tumpline
283 (šuˊnčːč, any rope or band for carrying burdens) were always made of hemp (?) according to M.P. and J.P.; other informants (M.L. and S.G.) say that the finer grades of milkweed twine were used (fig. 13, a). Women always placed the tumpline across the upper forehead, occasionally wearing a coiled basket cap for protection. Men placed the burden strap across the upper chest and deltoid muscles (see vignettes, fig. 13). Bundles were never carried on the head and seldom in the hands.

286 Formerly the making of straps and nets was a man's work. A carrying net was begun by coiling a length of cord around the left hand four or five times and tying the ends together, forming a ring about four inches in diameter. (The dimensions herein are those of an ordinary carrying net owned by the informant, M.P.) This was fastened to a ramada post, a tree, or any convenient place at about the shoulder height of the maker. The twines used were always of double thickness. That is, a length of twine was chosen and its center point thrust into the split end of a wooden needle: the two dangling ends were rolled together on the thigh [284] to form a single length of twine. The open end was fastened to the rope ring with a few half-hitches; then the netting stitch began.

[199] Handbook, 534.

[text continues on p.85a]

1: Gayton E-5 (1925-1930) 1948 NS29 Yokuts NS29
[P. 84] Wukchumni
ANTHROPOLOGICAL RECORDS
482
286

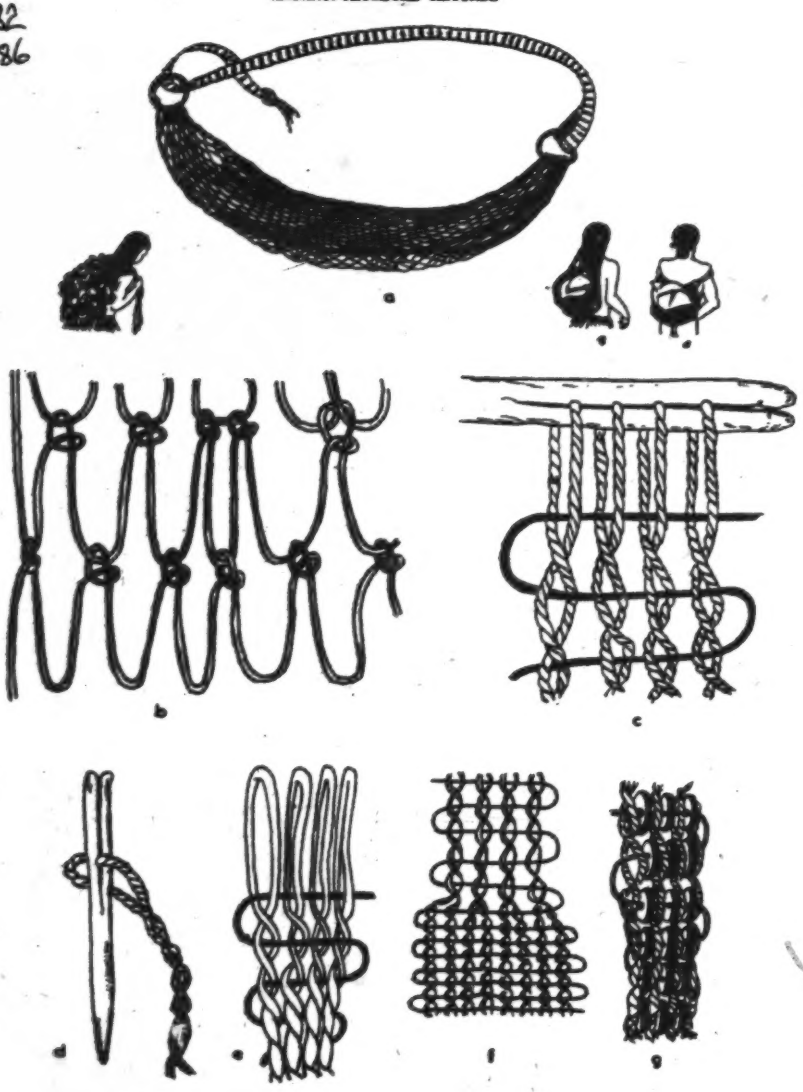

Fig. 13. Wukchumni netting and weaving techniques. a, carrying net and tumpline. b, enlargement of simple netting knot. c, enlargement of tumpline weaving. d, weaving needle. e, tumpline with warps and wefts expanded. f, change from 4 to 8 double-twisted warps. g, belt with shell discs inserted on weft between warps. Vignettes: manner of using tumpline.

838 gathering trips, that he would hurt no one, and not to laugh at him. He had no facial hair. "Finally," said M.L., "he took a man and that killed him. He said he hated women."

Death, Burial, and Mourning

764 A death in a family might be announced by any of its members publicly or to any of the deceased's relatives. Relatives in other villages were usually notified by a winatum. Burial usually took place the morning following the day of death; but if death occurred late at night, then burial would be postponed until the morning of the second day. Since relatives were normally within a day's traveling distance the corpse was kept until their arrival, but it was never kept more than two full days. The bereaved persons wept and wailed until interment. [767] Some professional corpse-handlers (tono č:m) sang doleful songs. Especially grieved individuals fell on the ground and threw ashes over themselves. (M.P. saw her maternal grandmother do this when M.P.'s mother died.) The corpse of a person who died not more than one day's journey from home would be brought back on a litter by three or four men. [482]

Immediately death was recognized, the corpse was prepared for exhibition and burial by some relative by marriage, i.e., one outside the individual's lineage. Thus a man's body would be washed, the hair washed and combed, and his best clothing put on by someone in his wife's family, his sisters-in-law or "aunts"-in-law, but never his mother-in-law. A piece of shell money was put in the mouth; the eyes were not closed. The wife herself often helped. The opposite, of course, held true at a woman's death. Children were given this preburial care by someone in their mother's family, not their father's to whose lineage they belonged (J.B.).

Another informant (M.P.) said that the family who would do the ritual washing at the Annual Mourning Ceremony (the "opposed" party called by the term gu'i) came at this time to prepare the corpse. Furthermore, just before the corpse was flexed and wrapped, it was the privilege of the gu'i to remove beads and other ornaments from it and keep them. Also, at this time the gu'i brought gifts of money to the relatives of the deceased, and in return they received gifts of food -- the jerked meat, dried fish, and salt -- which the mourners now could not eat. A family which was extremely sad would give away everything, especially if a daughter died (M.P.).

[767] Still another procedure was described by M.L., who said that the women buriers (tonoč:m) came to wash and dress the corpse, as well as to flex it for burial.

[431] All persons who came to visit the bereaved at the time of death received a little payment from the grieved relatives.

764 767 All Wukchumni informants stated that it was the women tonoč:m who finally arranged the corpse for disposal and that the disposal was invariably interment. Cremation they attributed to the Monachi and to "people up north."

764 M.S., the ancient Yaudanchi, said that flexed burial was always practised by Yokuts people, cremation only by the Mono. She knew of a Waksachi doctor, wai´'i:s, who was cremated [766] by his two wives, Mawo´kono, a Wukchumni, and Pawečiku´do, an Entimbich. They lived in Drum Valley.

For burial the corpse was always flexed, knees to chin, hands to sides of face or temples. It was tied in this position, then wrapped -- in deerskins if the family had wealth, in tule mats for most people -- and tied again. After European blankets were introduced, blankets of the deceased were used as wrappings.

[767] Meanwhile other tonoč:m were digging a grave by means of digging sticks and shallow baskets (usually old seed-beaters). A grave was about 4 or 5 feet long and seldom shallower than 3 feet. Cemeteries were located one to two miles away from a village.

[482 286] The corpse was carried to its grave by one of the strong female tonoč:m by means of tumpline and carrying nets. Such women had extra large and strong nets for this special purpose. As they walked to the cemetery they constantly called to the previously deceased to watch for this relative of theirs who was now coming. The corpse was carried three times around the grave and then deposited on its back. As she did this the carrier or leader of the tonoč:m said, "I have carried you, čoinemniu [Choinimni person, or whatever]. I have taken you to the graveyard. You are going to get buried. These people [accompanying relatives] are going home." Then the relatives added, "We are going to make a mourning ceremony for you. Don't come back. You must not see your people any more. You have to go north now. Ṭ:pni is there. You have to stay there" (J.B.).

Then all present, tonoč:m and relatives, threw in earth and they all ran home lest the spirit follow them; no one might look back (M.P.). The earth was filled in and tramped down by the women who dug it (S.G.). No food, gifts, or any objects were left at the grave. According to M.P., on their return home the 767 mourners washed the tonoč:m and paid them for their services. They were under no restrictions of foods or activities beyond this time of cleansing.

[838] Whether all the tonoč:m were transvestites is a moot point.[247] Perversion (in these persons) was denied by M. and J.P., J.B., and S.G. M.P. pointed out that her husband's maternal grandmother was a funeral singer and

[247] The native word, tonoč:m, has been used throughout this discussion in its meaning as "burier" or "corpse-handler," not "transvestite."

[P. 147 a] Choinimni

Both sexes wore the hair long, banged across the forehead by women, parted in the middle and held back with eagle-down cord by men. Women tattooed their chins, and a few wore a bone through the nasal septum; both sexes had pierced ears. Men plucked beard hairs with split-twig tweezers. The hair was brushed with a soaproot brush which had curved tips on its bristles. White paint put on over red paint was used ornamentally.[8]

A hairnet served as the foundation for feather head ornaments, the usual ču and sema, but it was also used by any man who wanted his hair held compactly for practical purposes. P.D.W.'s net, made of grocery string, is now University of California Museum specimen no. 1-27001. The method of putting on the net is as described for the Central Foothill region and shown in figure 7, Part I.

MISCELLANEOUS DATA

Means of transport.--As with all Yokuts dwelling upon the lakes, sloughs, rivers, and creeks of the San Joaquin Valley, the Choinimni were expert swimmers. Infants were immersed in icy waters before they were able to walk and learned to swim from that time. A swimmer in the San Joaquin used "a long overhand stroke."[9]

The Choinimni at Sycamore Creek made small tule rafts for use on the river near their village; these carried one or two persons.

The large barges of tule, made for the journey to Tulare Lake, were constructed in sloughs about ten miles downriver from Sycamore Creek. These were 50 feet long, of three long separate bundles bound with willow withes; the two outer ones were raised slightly as a sort of bulwark above the level of the center bundle. Each end of the boat was pulled up 2 to 3 feet higher than the deck. Along the center was piled all the equipment, which "included mortars and pestles, baskets of acorns, acorn bread, seeds, meat, skins for bedding and many other things." Eight to ten persons, usually of one or two families, sat along the sides while four men stood and poled, though this was mainly for guidance as the river current carried the craft. The return trip was made toward summer while the river was still high enough so the boats could be poled upstream to the original point of departure. From there the dunnage was carried afoot up to the village at Sycamore Creek.[10]

According to Jeff Mayfield, the carrying net of milkweed twine was used to support the conical burden basket on the back, though it is implied that this was done only with an excessively heavy load, such as acorns. Occasion-

[8] Ibid., 16, 17, 23, 26, 27, 38, 39, 40-42.

[9] Ibid., 29, 12.

[10] Ibid., 29-31, 37.

[P. 147b] Choinimni

Occasionally a basket cap was worn under the tumpline to ease the pressure, as was sometimes done when carrying a heavy child in a cradle.[11]

Musical instruments.---The elderwood flute (u´tač) had four holes. Not many men could play it; P.D.W. thought one had to dream about it to become really adept. Two Choinimni experts at Kulušao were Kudu´ma and La'hai´yi. Samson Dick (Ya´ki) is the only person living now who can play well.[12] The hawk shinbone whistle (pu´sač) was held in the mouth while the musician executed dance steps. This kind of whistling is called wušinuha´o, the term applied to ordinary (European) whistling with pursed lips. The elderwood clapper (ta´wal) was used for most ceremonial accompaniments, the cocoon rattle (sa´nač) being reserved exclusively for doctor's shamanistic dancing and for the Bear Dance.

Beating upon a hollow log is reported by Mayfield.

A short musical bow, twanged upon while one end was held in the mouth, was heard by Mayfield. Whistling, he said, was used only for signaling.[13]

The singers who accompanied dancing were called ale´kič; the act of singing, or songs, e´lkaš.

Paint.---White paint (ho´sot) was a clay "dug up in the swamps around here" (i.e., at the edge of the foothills toward Centerville). Red paint (hu´'iyu) was got in trade from the Eastern Mono. Black paint (wa´wən) was of unknown source. All these paints were lumpy; in preparation they were ground or rubbed down on a rock, then mixed with grease and applied with the fingers. P.D.W. insists that there were no distinctive totemic paint patterns. White paint, crudely smeared, was worn on a doctor's arms and body when he was dancing.

Pipes.---A pipe of wood (elderwood) was called a´tsi. P.D.W.'s pipe, the typical Yokuts pipe, was about 3 inches long, about 5/16 of an inch in diameter at the base and 1/2 inch at the outer end. The hollowing for the "bowl" was about 1/4 inch in diameter, and held but a small pinch of tobacco. Only one or two puffs were taken, perhaps twice a day. A pipe of clay was called sə´kmai; these were not common.[14] The other common form, comparable to the wood pipe, was called si´kil (cane) from the cane which was obtained for this and for arrow-making from the Aiticha; no cane grew up in the hills, said P.D.W. The cane pipe was 3-6 inches long and was often carried behind

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[11] Ibid., 23, 40.

[12] This man, who was at outs with most of his neighbors at Dunlap in 1927, refused repeated requests to become an informant. Other Indians apologized for his unwillingness, although his refusals were made with the greatest tact.

[13] Latta, op. cit., 25.

[14] Mayfield claimed he had seen no clay or stone pipes of the Choinimni (ibid., 21).

227 Large fish, such as salmon, were speared with a two-pronged harpoon. The whole instrument was called piče´kamni, the handle, ti´mːs, the hooks or detachable points, mike´, and the strings, hilu´s. Speared fish were: e´pːs [262] (lake trout), poi´yəm (whale [sic], pike?), and gai´hːt (salmon).

The carrying basket (a´ñaš) was "used by 482 every woman"; it was carried by means of a tumpline (wi·čː´n).

The carrying net (wa´lak) was made and used by men only.

252 Women pounded acorns (pai´yːn) at bedrock 412 mortars (tinːl), using a large pestle (če'; pa´lui, Gashowu). Acorn mush was called ki´nːm (ti´pːn, Gashowu).

MISCELLANEOUS DATA

276 Tobacco.---Tobacco (pa´'om) grew plentifully in Dumna and adjacent foothill territory, according to B.W. About April it would be well grown and turning yellow; then old people, men or women, went out to pick it. They pulverized the dried leaves, added water, and formed the paste into a biscuitlike pat called šo´gən. When dried this tobacco was smoked (pa´mon, to smoke) in little pipes (su´ktaə, pipe of elderwood [su´kut]; si´kːlao, pipe of cane [sikːl]). B.W. has seen stone pipes, but never any of clay.

[787] At night before going to bed, men or women who wanted good health or were seeking supernatural dreams would cause vomiting by eating tobacco and lime. The cake tobacco was pounded up in a special small mortar (koi´wːš) with burned shells (ok), water added, and the mixture eaten or drunk in very small quantity.

Blankets and clothing.---The rabbitskin 281 blanket (xeu´či; cexːˊna, Gashowu), made of the skins cut in strips and rolled, was made by women. B.W. could give no intelligible description of its manufacture. (Mexican or American blanket was called subo´n.) Women also "made clothes of deerskin."

Ferrying.---Everyone was a good swimmer, 481 but children, sick persons, and goods some- 501 times had to be taken across the San Joaquin 285 River, which is swift and deep. For this pur- 484 pose there were large flat-bottomed baskets called te´wːč (taskai´, Gashowu). These were tightly coiled, but were not waterproofed. Infants and goods were placed in these and pushed ahead with one hand by one or two swimmers. A [758] sick person would be laid on a raft of two or three logs; these too were used for goods, but baskets were preferred. Rafts also were pushed by swimmers; the river was too deep for poling.[39]

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[39] The Mayfield family were assisted across the San Joaquin River by a group of friendly bathers who, if not Dumna, at least were their close neighbors (Latta, op. cit., 11-12).

278 824 757 area was covered with dry wormweed which was then fired. Mike Wyatt once had rheumatism in his shoulder. His relatives made a bowl of this medicine, applied it to his shoulder, and lighted it. They did this several times, whenever the pain came; then it was cured.[96]

Hunting

224 Mice were trapped between flat stones by propping the upper stone on an upright stick resting on an acorn. Inferentially, these traps were set out at night. In the morning the owner went out, collected his quarry, then threw them on the coals to cook just as they were. A little mouse made just two mouthfuls, said J.R. Only mice were caught this way.

Tree squirrels were shot with arrows or captured by trained dogs.

Ground squirrels were drowned out of their holes in wintertime by digging drains to run water into their runways. When an animal emerged, it was struck on the head. J.R. many times helped his father at this, which was a common resort in winter when food was scarce.

To obtain deer, drives were organized by several men in a community. At a deer drive each man knew his position and the territory he had to cover. The usual method was to drive "around a mountain" [probably a large hill] in circular formation. As the men were closing in they shot any deer that came within range. Of those encircled, they killed all they could, although some invariably escaped. "What they shoot, never gets away. They die pretty quick. I have seen them shoot with the bow and arrow, you know. They die quicker than with the bullet. When they shoot the deer, you know, he gets sick and dies, just a little way off." So said J.R.

Up at Wowo·na (Miwok territory) the deer-drivers deployed around a mountain which had a flat rock on top and one precipitous side. They pressed the deer up the mountain until they were forced to huddle or jump off. Those that did not destroy themselves by leaping were shot.

In the evening as much of the game as possible was packed home. Often this method netted more meat than could conveniently be carried. Hence some carcasses were left overnight, hung head down by the hind legs, in trees. In the morning the hunters would return to skin them.

224 ●482 A man could carry one deer by means of a tumpline. The animal was skinned, all save the legs from foot to knee [and the entrails removed?]. The legs were tied together and the carcass packed on the back. The blood was

[96] An elderly white man told me of his own experience. He propped his rheumatic leg near a hot stove; he fell asleep and woke to find his leg painfully burned and blistered. However, the rheumatism was not felt thereafter.--A.H.G.

224 saved, being carried in the stomach and the stomach carried in the skin [by the same man?].
● 482 At home the deer was hung up, perhaps for one night, the next day [it is butchered?] it is cooked in the ashes. A single deer would be consumed in two days by the average family. Everyone helped skin the animals, and everyone in camp [every household?] was given a piece of meat about "as big as your hand and wrist."

224 Men hunted all the year round; even in winter they would go out all day with their dogs.

231 A few Indians had dogs trained to hunt
224 foxes. These followed the fox whenever they smelled one, and treed it. The master followed with his bow and arrow and shot the beast as it watched the dogs below. The dogs jumped the fox the instant it fell but were immediately beaten off, otherwise the skin would have been torn and the meat bruised. Wildcats were got by the same method. For fox and wildcat but one or two dogs were used at a time.

A small breed of dog, about twelve inches high, was used for hunting rabbits. They were trained to track rabbits to burrows or rock shelters. The owner had a slender stick, three or four feet long, which he ran into the hole until he felt the hiding animal. Then he poked and twisted the stick in its fur, pulling it out. It was killed with a blow on the head. "A man would be gone all day hunting like that," said J.R.

Gray squirrels were abundant. The dogs would pursue these, perhaps catch them, before they got up a tree. The owner was immediately behind to secure the quarry for himself.

These hunting dogs somewhat resembled coyotes: they had long tails, some had long, slightly woolly fur, "coyote color, pretty near yellow." There were also black, white, and spotted dogs. Some had short fur. Some were as high as a man's knee: the rabbit dog was smaller than a fox dog. A hunter would possess both kinds. These pets were fed acorn soup, bones, feet of squirrels, rabbits, and the like, also entrails. They also were permitted to hunt for themselves and ate whatever they caught.

"When a man takes his dog out, the dog knows what he is going to do. He hunts. He watches the animal, but he would hunt whatever he saw first. He would jump anything. The dog knows what he is hunting. They run after anything, these dogs, after they learn what to do, you know. But they can't catch the coyote. They get away every time. Nobody ever ate <u>them</u>." (This, and all hunting information is from J.R.)

Horse Stealing

579 A man named xo'šin (M.N.'s father-in-law,
674 said the narrator, M.W.) was the ringleader of

579 674 horse, got on it, drove a bunch of horses this way, back across the water at the same ford, and so on across the valley and back up here. Maybe at Picayune they would kill two horses for the Indians there. Brought the rest up here. [492] Maybe some people wanted a horse, so they didn't kill that one, but kept it to ride. When those horses were all eaten up, some time, they would go down again.

224 492 When they had horses here, they would go down below Raymond to the valley for elk. There they would separate into two parties and go around in a circle. Maybe they would see the elk going ahead of them. The elk would go faster than the horses. So they didn't run after the elk, but went sideways to head them off; drove them, thus, in the direction they wanted. They could see a long way, for this was on the plain. They never chased the elk directly, but at an angle; made them go in the direction they wanted. Then they closed in on them. The riders had no saddles, only a little rope (a ja quima, presumably). But they had guns. When they had caught up with the elk, they couldn't get away. When one tried to break through, a man would shoot it through the heart. Then they let it go. They would find it later. They had to attend to the others that weren't yet shot. Later, when all had been caught or had got away, they went back to find those that had been shot and left to fall. They left none of that meat there; it was all brought up here.

579 674 Such raids were made occasionally in the summer, possibly in the spring, but J.R. thinks only in the summer season.

Fishing

226 227 Chukchansi people used to go down to Gashowu and Kechayi territory (near Friant) to spear salmon on the San Joaquin River. They had their own fish camp, as had other tribes, right at the river. Salmon were always speared with a harpoon. [177] J.R. did not know what was used for a point before nails were introduced; sharply filed nails are now used. In the harpoon, the point is loose in the shaft head but fastened to the pole with a string five or six feet long. When a fish is speared the point comes off the shaft head and the pole, remains in the fisher's hand. The pole (spear shaft or handle) was about six feet long. When the fish was pulled in, it was knocked on the head with a stone; then the forefinger was inserted in the wound and the toggle-point extricated.

226 When several men fished together they divided their catch at the riverbank; there might be about two fish to a man. The fish were run through the gills by a withe, which [482] was then twisted onto itself and slung over the shoulder. At the camp a good coal fire was [252] ready, and one salmon would be slit open and roasted for immediate eating: this would serve four or five men.

226 four or five men. [No mention was made of a first salmon ceremony, but this may be what the informant, J.R., had in mind. -- A.H.G.]

252 The fish were dried at the camp. The im-
251 plication is that men did all the work connected with salmon fishing, but it was not so stated. The fish were cleaned by slitting full length down to the backbone. For better drying, the flesh would be slit again so the sections would be thinner. As a supporting rack, slender sticks were laid across the lower limbs of trees or sturdy bushes. The fish were hung horizontally on these, the flesh hanging down each side. They were frequently turned around [482] so the sun got at all parts. They were put in a sack [skin?] and packed home with a tumpline. A man carried about two hundred pounds of fish. At home, the fish were taken out and hung on sticks across the roof of the storehouse, so they would not spoil. Such dried salmon were eaten before they got too dry: "they don't keep all winter," said J.R.

226 Creek fish, trout, were stupefied with the
278 leaves of a plant called s'ikahi that grows in the lower foothills. The bush is six to eight feet tall, has leaves round and a bit larger than elderberry leaves. These were pounded, mixed with mud, and tossed on the water of pools. "It makes the fish sick. It kills them." But it did not affect the quality or flavor of the food: "it doesn't get into the meat." When the fish come to the surface, "everybody" came out with baskets and dipped them up. "You get the basket right under them, throw them out." Sometimes men and women caught them with their hand [presumably when the fish were stupefied, not by underwater diving as described for more southerly Yokuts].

These fish were small, three to four inches. They were cooked in hot ashes (not [25] coals), which cooks but does not burn them.
252 Some fish were eaten at once, for supper, but the majority were dried for later use.

251 In preparation for drying they might be cooked first or not [perhaps depending on weather conditions], though usually they were not. When drying, they were laid out [cleaned?] on flat rocks and took two or three days to dry. "They are dry just like a cracker." As much as half a sack of these would be put away by a
252 family for winter consumption. Enough for a
251 meal was taken out, cooked in ashes, and then pounded up to be eaten with acorn mush. "They are a little bitter, not much, when you eat them." said J.R. [There was a suggestion, not clearly stated, that fish meat was dried, pounded, and put away like pemmican.]

226 In Chukchansi territory Powers saw fish weirs with inserted traps into which the fish were driven from upstream by means of a brush sweep like that of the Wobonuch (see below). The Chukchansi also speared fish from a booth

226 over the water such as Mayfield described for the Choinimni (see above)."[1]

Firewood, Firemaking

313 Pine, oak, manzanita, chaparral, live oak, "any kind" of wood, was used for making fire, said N.W. To fell a tree, it was burned around its base. Baskets of water were kept at hand to control and eventually to quench the flames. No stone ax was used. Both sexes carried wood, which was bundled up with string and then
313 ported by tumpline. A piece of flat bark was
● 482 laid on the back and held in place by the load, to protect against bruising. A person could carry about five logs, four feet and eight inches in diameter, or more if the logs were smaller, N.W. thought.

313 Dead trees were felled by putting live coals at the base. When a tree burned through and fell, the fire was extinguished with earth. Logs were severed by burning through, leaving lengths suitable for transport. House, assembly, and sweat house fires were banked, so coals were readily available for relighting, said J.R.

372 Buckeye wood, for fire-drill hearths, was collected and stored. The fire drill [wood?] was worked in a hole at the edge of the hearth; the drill was rotated until smoke issued. [Continuing, or another method;] A piece of oak gall was set on the hearth and the drill rotated in it until it ignited. This was picked up and sparks from it were blown on dried grass or leaves. The process took two to five minutes. J.R. saw his father make fire this way; he himself never did it.

There is a growth on an oak tree "something soft and thick, maybe like rubber," which is essential in preparing fire, said N.W. This is laid on top of a buckeye board hearth, which in turn is laid over some plant material (mesini, wormwood) which has been dried and rubbed into powder. A buckeye (sic) drill is twirled between the hands on the hearth; both the oak growth and mesini catch fire. "It takes both to make the fire, neither one will ignite by itself." It took about thirty minutes to start a fire; it ignites suddenly "just like gas going off." Then the burning material was moved onto a rotten log, or whatever firewood was to be started. People who had no fire got it from this, took it to their own home. Ordinarily fire was got from neighbors, and it was only on rare occasions, when all fires had gone out, that firemaking operations were necessary.

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[1] Powers, 376.

[p. 188 b] Chuckchansi

352 531 854 831 The top was bound with the water plant root. About four inches from the top was a horizontal band, woven with monoxil, indicating the sex of the child: a boy had a zigzag or arrowhead design, a girl contiguous diamonds.[105] Sometimes red or black roots were woven into designs across the bottom; these, too, showed the sex of the occupant.

352 854 The first cradle had a band hoop extending forward over the infant's head. There were no fastenings for a tumpline, because a new baby was not carried on the back, but in the arms. "They were afraid to carry a new baby on the back because its eyes might fall out," said N.W., laughing. Also it would have flabby hanging cheeks.

The baby was held in place on the cradle by means of a milkweed string band about two inches wide which passed through loops along the cradle sides. For a young baby lying on its back, the band was not drawn very tight; [237] for an older one carried upright, the lashing prevented movement of any kind. Under the lashing the baby lay wrapped in a rabbitskin blanket. Today a little pillow, mattress, or a cloth baby blanket are used on the cradle under the infant. A child was kept on a cradle until it could walk and talk. Confinement in the cradle is not continued as long as formerly: Lillian thought children remain babyish if kept in the cradle too long.[106]

As the baby grew it was transferred to second and third cradles, the last being some thirty-five inches long. All were of the same construction as the first save that the hood was fan-shaped, not a mere hoop. On a Chukchansi cradle seen by Thrall, the head was woven as an integral part of the supporting hoop. The upper or back edge of the fan had corners which were merely tied to the top edge of the frame with milkweed string. [480] Large cradles had a tumpline attached for carriage on the mother's back.

The larger cradles were kept after the child had outgrown them and, as long as they were in good repair, were used for younger infants of the proper sex. An infant girl would not be put on an older brother's former cradle, or vice versa.

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[105] Parallel diagonal lines signified a boy's cradle, zigzag a girl's, says Kroeber (Handbook, 536). Miss Thrall's information is in line with that from other Yokuts.--A.H.G.

[106] Miss Thrall has notes on the treatment of K.W. "He was teething and fretful, consequently he woke frequently, when he would be taken up in the cradle, bounced on the knee, and a general attempt made to soothe him. Lillian usually held him when not otherwise occupied. Sometimes Nancy (his grandmother), or Emma, or other older girls take over when Lillian must go elsewhere. Whenever the baby shows he is unhappy, he gets all the attention the older people can think of to give him, apparently. On the other hand, one attempt to quiet him is to put him back on the cradle soon after taking him up, or when he cries in arms. This seemed to have no effect, and frequently he was taken off again at once."

W Y 285 192 It may be worth noting that, in Michahai at least, there is a special term for the coiling technique, but none for twining; hence, li·h·'li na (coil I (my coiled basket)) and ti·'i·si na (make I (any kind of basket twined or coiled)).

W Y 285 192 415

Coiled ware.---1. o·sa (Michahai, Wukchumni, Waksachi). This is called "bank" in English, as money, sacred talismans, or any sort of treasure was kept in them. D. said the snake doctors kept their pets in these while in captivity for the Snake Ritual (usually they were kept in cages of open-twined basketry).

2. a·mat (Michahai), kača·o (Wukchumni), a·po (Waksachi). This was an individual eating and drinking dish. When made with curved sides, it was used by women as a cap under the tumpline.

W Y [292 482]

2a. pi·kwo[1] (Waksachi). The woman's basket cap, according to B.O It was never donned save for use under the tumpline.

3. a·oki (Michahai). A modern shape which is said to have been invented to keep bread in; in English it is called "bread basket." D. was firm in her statement, which is corroborated by independent Wukchumni information, that it was never used for keeping acorns or any other purpose. Yet it closely resembles the large coiled baskets used for washing and as gifts at rituals. Water was kept in similar baskets for household use.

4. koiyo·to (Michahai, Wukchumni). The circular sifting tray, which was about two feet in diameter.

W Y [524]

5. tai·wan (Michahai). A circular gambling tray used in the women's dice game. It might be two to three feet in diameter and was distinguished from the sifting tray by its more sharply curved sides and superior decoration.

Twined ware.---6. po··no (Michahai), tapono·či (Waksachi). This was the cooking basket. The traditional and only decoration of these was four horizontal bands of redbud. The basic material was called taka·ti (Michahai; sourberry, D.; chaparral brush, S.O.). When seeds were stored in the house, they were put in baskets of this type and covered with a coiled flat traylike cover called uti·'i (Michahai).

W Y [482]

7. a·naš (Michahai), wo··no (Waksachi). The burden basket, carried by tumpline on the back, was twined of takati and starched with soaproot (to·hod, Michahai) liquor.

8. ča·phai (Michahai), ta·myuk (Wukchumni), ta·neho (Waksachi). This name was used for the handled seed-beater or for a basket of the same shape without the handle. The latter was used as a sieve or for any other purpose for which it proved convenient.

8a. A larger coarser, unhandled variant of the above, also called čaphai, was used exclusively for catching and carrying fish.

W Y [231]

9. Cages of open twine weave were used to house pigeons, rattlesnakes, and possibly other small pets. These had pointed bottoms, were covered with a lid, and hung from trees.

Cordage and Nets

W Y 281 [237] 283

Sinew cord (ta´mowi´ wi·šib) was made only by men. Sinew from deer leg and back was saved and dried. When wanted for use, it was soaked in water, then pounded between two stones. A man often used his arrow straightener for this if he had one. The material was worked over with the fingers, smoothed, and finally separated into filaments.

To make cord used primarily for bowstrings and arrow tying three fine strips of sinew of differing lengths were knotted together evenly at one end. The knot was held in the left hand, and the three strands, well separated, lay on the right thigh under the palm of the right hand. The first movement was toward the body: the left hand held the strands taut while the right hand rolled them up the thigh. The left hand then relaxed, which permitted the knot end to roll up. It was drawn tight again. The right hand then rolled the string, which in the portion between the two hands was now a single 3-ply cord, forward down the thigh. This completed the cycle of movements which produced six to twelve inches of cord. The pressure of the right hand was not relaxed from start to finish. The movement of the hand was not straight back and forth. On the back stroke it was a rotating movement, the thumb side of the hand moving but slightly while the outside described an arc. The forward stroke was straight.

The next section of sinew was treated in the same way. The left hand grasped the cord just above the point where the three strands separated. New strands were spliced, i.e., rolled in by overlappings, never knotted. As the basic strands were of different lengths, only one need be spliced in at a time, which not only was easier to handle but obviated excessive thickening in the cord. The strand to be spliced was always placed in the center of the trio as they were rolled up the thigh.

W Y 283

Milkweed string (wi´šib·b wiši´bi; milkweed, wi´šib·b, Waksachi; če´, Michahai) was made only by women. B.O. thought this string was all 2-ply, but was not certain. Milkweed plants were laid out in masses on bedrock mortars to dry. The stems were then sprinkled with water (not soaked) and pounded. The fibres were smoothed down with the fingers. The rolling process for making it into string was exactly like that for sinew cord.

A coarser cord called sa´h·p (the Yokuts ša´) was also made of willow bark by Waksachi.

W Y ● ● 482

The carrying net (tapi´h^{a}) and tumpline (ta·´wap) were made by women, said B.O., but were most used by men. Women carried the line over the head and in so doing used the coiled basket cap (pi·´kuoš) which they never wore at any other time. Men placed the line across the chest and deltoid muscles. Any objects which the net could contain might be carried in it. The material and process of manufacture

[P.229a] Western Mono NS25

W Y 482 [439]

were identical with that of the Wukchumni. The Eastern Mono used these nets when coming over on trading trips.

MONEY, NUMERAL SYSTEM

W Y 436 [439] 804

All money came from the west through the medium of trade. B.O. thought that the Tachi themselves made humana; the Waksachi retain the Yokuts name for this slender tubular bead. They were valued at about twenty-five cents each according to B.O.; S.O. said they came about ten for one dollar, or eight if they were extra long. The small clamshell discs (močo´ko) were measured Yokuts-style around the hand and wrist (fig. 14, e, f, Pt. I). This length was then doubled and called a muke´č:t, and valued at about two dollars according to B.O. S.O.'s evaluation is wholly different, five cents for once around the hand and doubled (1 mukeč:t), ten cents. This is more in line with other statements. B.O. may have had the looped-up arm's-length unit in mind.

When red and blue European beads were introduced, these were measured by the handful, the red being more esteemed. The red ones were called piša´kono´gidi, the blue ones šil:´mkai in Waksachi.

W Y 192 802

Numerals (Michahai, S.O.)

1. y:t	15. y:´čum
2. pu´noi	16. čo´lpum
3. so´p:n	17. no´mčum
4. hatpa´na	18. mu´nčum
5. yit:´šn:l	19. no´npom
6. ču´lipi	20. punoi´tsi'ao
7. no´mč:n	21. punoi tsi'ao y:t
8. mo´noš	22. punoi tsi'ao punoi
9. no´n:p	23. punoi tsi'ao sop:n,
10. tsi'a´o	etc.
11. y:´čam	30. sop:n tsi'ao, etc.
12. po´ctom	100. y:t pi´ča
13. co´yum	1000. tsi'ao piča
14. ha´čpan	

PLEASURES

Games

W Y 526

The following games were played by the Waksachi.

Shinny.--This game (koniu´šiko, Michahai; nanata´kow:t, Waksachi) was played with a hole at one end of the field and a post at the other. The ball had to be holed five times, though not successively, in order to win. When the ball was struck to a partner down the field and did not reach him, he had to come down the field to get it (i.e., the striker did not go after it).

W Y [525]

This was the favorite game for betting and side betting. Usually three or four men played on a side. There was no special way of choos-

2: Kroeber E-5 (ca. 1918) 1953
NS29 Yokuts NS29

285 171 Chemehuevi forms are rounder, while the farthest traceable affinity is the small spherical basket of the Luiseño and Cahuilla. It is therefore possible to set the focus of the constricted neck forms among the southern Yokuts or the Chumash. As between these two groups, general grade of culture favors the Chumash, while the Yokuts are more central in the distribution of the type. The northern Yokuts, on and near the San Joaquin, do a much poorer grade of work than their southerly kinsmen, as do the Mono. But the Tübatulabal approximate the Tulare-drainage Yokuts in fineness of execution.

292 285 [482] The woman's basket cap was probably Yokuts. At least the southern Yokuts seem to have shared it with their southern and eastern Shoshonean neighbors. This hat was, however, worn only with a load on the back, not habitually. It is curious that the range of the southern California cap coincides with that of the carrying net; of the northern form, with the technique of exclusive twining.

285 [53] The pattern scheme of Yokuts baskets varies from the prevailing horizontal banding of southern California to the diagonal, vertical, and broken effects of Miwok basketry—largely according to locality. Materials and technique are also intermediate. The sewing is close, as in the north; in the Shoshonean area to the south, wider spaced. The foundation is a bundle of *Epicampes* grass, as in southern California; the wrapping, however, is not *Juncus*, as there, but more woody materials: root fibers of sedge (*Carex* or *Cladium*?) for the ground color, *Pteridium* fern root for black, bark of *Cercis* or redbud for red.

Very flat trays were made in coiling. The banded decoration of these brings them nearer Cahuilla and Luiseño ware than Maidu, where radiating designs prevail in flat work. Miwok coiled trays have gone out of use, if they were ever made. Yokuts women em- [525] ployed the finest of their trays for dice throwing; but of course the type was also put to more lowly and daily service.

Twined baskets were more poorly made, but filled a greater variety of needs and perhaps outnumbered coiled pieces in the normal household. The carrying basket was loose enough in texture to be describable as openwork. The interstices were filled with a mucilaginous smear. The commonest of all receptacles is an oval or ovate tray, with a rounding bottom. The term "winnower" describes only one of its manifold uses. The seed beater was but such a tray, one end of which was continued to a handle. Another form of tray was rounded triangular, nearly flat, and wholly or partly in [177] diagonal twining. This has almost certainly been borrowed by the Yokuts from the Shoshoneans on their east. The Tulare Lake tribes must once have possessed a considerable array of special ware in

2: Kroeber E-5 (ca. 1918) 1953
NS29 Yokuts NS29

tule, both coiled and twined; but as it made no decorative endeavor it has passed away with the disintegration of the culture of these tribes almost without preservation. (Pl. 50.) 285

The Yaudanchi affirm that they knew the pitched water bottle of the desert and southern California; but no specimens have survived.

Large baskets were used by the men to ferry women and children across rivers, as by the Yuki. The Mohave employed pots for the same purpose. [501]

Basket patterns had more or less aptly descriptive names, but these were ordinarily without symbolic or religious reference. Some of the names were adjectival, like "zigzag" and "crooked"; others denoted parts of animals, whole small animals, or familiar objects. The significance might be in the pattern as a whole or in the design element. (Fig. 47.) The number of names was not over a few dozen. 285 531

FIG. 47.—Yokuts basket designs. Yaudanchi: 1, 2, flies; 3, 4, deer foot; 5, arrow points; 6, 7, crooked; 8, 9, rattlesnake markings; 10, king snake markings; 11, water snake; 12, chek, wood-gathering crook; 13, tied in the middle. Chukchansi: 14, arrow point; 15, crooked; 16, millipede; 17, king snake markings; 18, rattlesnake markings.

The pattern designations of the Yokuts, like most of the patterns, are generally confined to themselves or their immediate neighbors; but their range, character, and limitation of meaning are typical for all the California Indians, whatever their varieties of techniques, materials, and forms of basketry. Where the matter has been most fully inquired into, as among the Pomo, it is found that design names are often combined, or modified by standardized epithets, which allow of the accurate description of even a complex pattern. It is not unlikely that the Yokuts may prove to have followed a similar system.

The carrying net, *chutia*, into which either a conical basket or a less shapely load could be set, reappears with the Yokuts. It seems to have been of southern California type, light and with detachable supporting band or rope. Pack straps of braided string were also slung around the load and forehead. 286 482

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

"We made a fort, principally on account of our animals. The Indians brought otter skins, and several kinds of fish, and bread made of acorns, to trade.

"Among them were several who had come to live among these Indians when the missions were broken up, and who spoke Spanish fluently. They informed us that they were called by the Spainards 'mansitos', (tame) in distinction from the wilder tribes of the mountains.

"They, however, think themselves very insecure, not knowing at what unforseen moment the sins of the latter may be visited upon them. They are dark skinned, but handsome and intelligent Indians, and live principally on acorns and the roots of the tule, of which also their huts are made."

The last is one of the few complimentary things written by Frémont about Indians. A similar account of the Kaweah River Indians is given in the report of the survey of July, 1850, by Lieutenant George H. Derby. An extract from the Derby report follows:

"Upon the 14th we arrived at the river Frances, [Kaweah] a large stream nineteen miles to the north of the Tule. This stream flows nearly west from the hills and empties into the Tache Lake about twenty miles north of its southeastern extremity.

"It is, at the point upon which we arrived, divided into five branches or sloughs, four of which separate from the main river, about five miles above, joining again from one to ten miles below, while the southern branch has a separate and distinct course from the Sierra which joins the main stream in the marshy ground near its junction with the lake.

"The country, eight miles in length by six in width, contained between these branches, is a beautiful, smooth, level plain, covered with clover of different kinds, and high grass, and thickly shaded by one continuous grove of oaks of a larger and finer description than any I have seen in the country.

"At this time each of the creeks were at its height, they are deep and four of them much wider than the Tule River. Their beds were also obstructed with floating and sunken timber previously felled for bridges, which the high stage of the water rendered useless; and we would have found it difficult to cross had it not been for the kind assistance of the neighboring Indians who flocked to meet us, and eagerly went to work carrying instruments and other property upon their heads and

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

swimming the animals and the little cart across without the slightest accident occurring.

"These poor people accompanied us from creek to creek, assisting us cheerfully at each crossing, and in return for their kindness I gave them a portion of our provisions and some dirty shirts, stockings and worn-out boots, which they prized as articles of exceeding luxury, and accepted them with vast satisfaction."

The people described are the Kaweah, who only a few months before had massacred the Woods party and had nailed a portion of Woods' skin to a tree. The reception given the Derby party is in direct contrast to that given the Woods party and lends support to the contention by pioneers that the Kaweah had been abused by that party.

Another interesting account of a similar occurrence, which took place among the Yokuts more than 70 years before the Woods party came to the San Joaquin Valley, is that made in his diary by Padre Francisco Garces when he visited present White River May 3, 1776:

"Those Indians related to me that in their land had they taken the life of two soldiers (who I persuaded myself were deserters), because they were very wicked with the women; adding that they had cut off the hands, had laid open the breast and all the body, had torn them asunder, and scattered the remains. I told them that also did the Espanoles put to death those who were evil-doers, and that presently would they punish two who had done wrong things with Indian women."

THE LAKE PEOPLE

The second culture is related in many ways to the one just presented, and will be known as the Lake Culture. Except at one or two village sites, which were well elevated above the highest lake level, they probably had no permanent dwellings.

Their houses were of a temporary nature and their entire life resembled that of wandering, migratory peoples. The tule mat was used for almost everything in the way of houses and camp equipment. These mats were made by laying the tules parallel to each other with a series of half hitches, or by perforating them with an awl and threading them on strings. In this way long rolls of thin coverings were made which greatly resembled what is known as grass, or reed matting. Some of these mats were used to sleep on. They were used as covering materials to form a shade upon the sun-drenched shores of

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

487 439 Her verbatim account of such trade is reproduced in Chapter XIII near the end of this volume.

Ichow, a full-blood *Wukchumne,* quoted freely in this work, stated: "Some of our men go to coast to trade, go over the mountains to Owens Lake to trade. They go across to coast by where Coalinga is now. They go across the mountains from Tule River across Kern River where white people built that Jordan Trail. My grandpa, *Chechin* (Che'-chin), told me about that. His father used to trade at them places. From here he take deer skins, antelope skins, elk skins, *kadis* (kay'-dis) [steatite], *ahdit* [salt from saltgrass], and good baskets over to them Indians at Owens Lake. He bring back lots of fine *kots* [obsidian] to make good arrow point and some salt like white people use. He sell that kots and that salt here for our money and buy more things to trade."

The most interesting account I have been able to secure concerning Yokuts traders came from *Wahumchah,* one of the last two living full-blood *Yowlumne* Yokuts. For two generations back, his direct male ancestors were traders. His father was born at the Yowlumne village of *Woilu* on the site of present Bakersfield. He explained the position of traders in his [361] tribe. Said Wahumchah, "My father told me he was born right where Bakersfield is now. His people had two villages there, one on each side river. One was on high knoll close by river. It was my father's business to trade and to run anywhere his 487 *Teah* (Te'-ah) [Chief] wanted him to go. He was *Winatun* 439 [Messenger]. Sometimes them people let fire go out in one 624 village. Then someone had to make new fire with two sticks. 372 Fire most always went out when it rained. Then everything was wet and it was hard to start new fire. Then my father would swim river and get fire from other village. If fire went out in other village he had swim across and take fire to them. That was his business.

● [482] "When my father carried fire he put it on top his head. He [481] put some ashes on piece buckskin. Then he put some red coals on ashes. He cover coals with ashes. Then he roll that buckskin up and tie it on top his head and swim across river. Sometimes them coals get pretty hot on his head. They burn him pretty bad. Most time he got his hair burned off top his head. [55] So Yowlumne call my father *Oi'-oi,* Roadrunner, because in 773 them old timers' stories Oioi stole fire and carried it across the river just like my father did."

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

[P. 104 not Processed]

CHAPTER VI

FOODSTUFFS

GATHERING AND STORING ACORNS

262 222 The acorn, which the Wukchumne Yokuts called *poo'-tus*, was the staple article of diet for most California Indians. It was stored, prepared, and eaten in large quantities and was the most common food consumed by them.

Indians living near the foothills preferred the mountain (Kellogg) acorns to those grown in the valley. The foothill scrub-oaks are smaller, and produce a smaller acorn, which contains a great deal of bitter tannin. The valley oaks bear a large acorn, often three inches in length and almost one inch in diameter. It is sweet, but according to the Indians, does not contain the nourishment found in those borne by the mountain oaks.

The process of gathering and preparing acorns entailed an immense amount of labor. The trees bearing the crop were often several miles distant from the rancheria. An Indian family would consume from one to two thousand pounds of [482] [462] acorns a year. They were carried to the rancheria on the backs of the *mokes* (mo'-kees, women.) The harvesting took place when the acorn crop had nearly all fallen from the tree. At this time, during the years of a good crop, the ground under the trees was almost completely covered with acorns.

[285] The Indian women used a flat-bottomed basket in gathering acorns. Stooping over, they slipped the basket along the ground and rapidly tossed the acorns into it. When the basket was full, it was taken to a burden basket and emptied. The burden basket was called *ahng'-ush* and was made of light, twined material in the shape of an inverted cone, being about twenty-four inches across the large, upper end and from two to three feet in height. The pointed end of this basket was often thrust into a squirrel hole to hold it upright while the acorns were being emptied into it, or the basket was leaned against a rock, or the trunk of a tree.

[482] When the ahngush was filled with acorns it was placed upon the back of one of the mokes. On top of the load she

Hest continues on p. 107

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

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Wahnemkut demonstrating the use of chng'-uk, the cone-shaped Yokuts carrying basket. When loaded it was balanced by means of the shoulders and hips. In her hand she holds kleta, the winnowing tray. The carrying strap is twisted so it will not slip from her head when she is walking.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

threw the basket in which she had been gathering acorns, sometimes also a child three or four years of age. This burden often reached a weight of about two hundred pounds.

During the summer of 1930 the writer saw one of the two then surviving *Nutunutu* (Noo-too'-noo-too) women carrying just such a load. She had waded Kings River in water almost to her waist and was just starting on a three mile trip to Del Piedra. Although she would undoubtedly have traveled the entire distance without resting, it is of interest to note that she willingly, and probably very gladly, accepted the offer of a ride.

The ahngush is carried with the large portion slightly below the level of the head and is held in place by a flat strap, called *sho-mit'-te*. A basket cap was often worn under the carrying strap. This protected the head of the moke. The Indians call this cap *wah-coo'-moots*. In the foothills the fiber for making carrying straps is obtained from a tall milkweed called by the Indians *hung'-uts hung'-uts*. Along the streams in the valley the fiber is often obtained from wild hemp, called *shock'h*, and sometimes from the fiber of the nettle, called *tro-we*. The strap is passed around the basket about half way between the top and bottom and across the upper portion of the forehead.

It will be appreciated by any one that great effort was necessary to bring a two hundred pound burden from the ground to the back of the moke. The basket was sometimes lifted upon a rock, or in the fork of a small tree, or upon a bank. The moke then placed her back against it, pulled the strap over her head, and walked away with it. Sometimes other Indian women, who were helping to gather the acorns, would lift the basket and place it upon her back.

Upon arriving at the rancheria, the acorns were placed in a granary. This granary was made of small branches which were bound into a circular form. The bottom of the granary was sometimes a foot or more above the ground. The granary was lined with grass and the acorns emptied into it. Some aged Indians have stated that this grass is both moth and squirrel repellent. The top might be eight or nine feet above the ground. These granaries would hold from ten to thirty bushels of acorns.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

BLACKBERRY JAM

262 137 222 Many persons, including those who have lived near San Joaquin Valley Indians, appear skeptical when told that blackberry jam was a common dish among those peoples. Wild blackberry vines covered the river bottoms in patches several acres in extent and climbed many yards above the ground. I have been informed by Kaweah River pioneers that single primeval blackberry thickets covered as much as five acres and climbed about through the willows so that a mounted man could ride under them. They were favorite hiding places for grizzly [231] bears, so I have been told by aged Yokuts Indian women, and it was customary to take dogs into a thicket when beginning to pick berries. Said *Ah-kah-dih'-nim,* an aged *Wukchumne* Yokuts, "The dogs chewed the bear's hind legs while we ran to camp."

262 222 The berries are ripe during the month of June. Along the Kaweah, shortly after it leaves the foothills, and at one or two other places where the vines have not been killed by burning, they are still loaded with ripe berries at that time.

The wild blackberry is not unlike the tame one. It is smaller and a little sharper in taste. But when they are completely ripened the berries are as sweet as tame berries and of much better flavor. This wild blackberry was an important staple among the Yokuts Indians, who called it *mah-mid.*

262 222 415 Descriptions of the gathering and curing of these berries still form one of the most interesting accounts of Yokuts food preparation. Two utensils, or containers, are utilized in gathering berries. The first container is an acorn shaped basket about six inches in diameter and ten or twelve inches in depth. It is rounded at the bottom and fitted with a deer-skin handle much like the bail of a bucket. The Indians call this basket [482] *chaw'-much.* It is suspended from the neck, and is one of the most convenient utensils used by the Indians, as it leaves both hands free for gathering berries.

262 222 [412] In addition to the chawmuch, a hooked stick is used in pulling the blackberry vines within the reach of the worker, and in forcing them apart so that berries underneath may be reached. The chawmuch having been filled, it is emptied into a shallow wicker basket, or colander, called *tah'-meuk.*

After the tahmeuk is filled it is emptied into the burden basket which is then carried to the rancheria in much the same

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

285 [222 481] within reach with a hooked stick, and rapidly pass the berries into the basket.

They call the blackberry basket *chaw'-mish*. It is built upon a foundation of cottonwood twigs and is formed by twining. The cottonwood twigs extend upright. The twining materials were looped about them and passed around the basket from the bottom to the top. The materials used in stitched work are also used for this twining. The tan hupud is the principal material, although bands of red are used to decorate the basket. The red material is the ahnup described before. In an emergency such baskets are quickly fabricated of tules.

285 415 During the season when the baskets are not in use for gathering blackberries they are used about the Indian houses as containers for materials of all sorts. They are generally [353] hung from the ceilings or walls, and in them you will find much the same sort of materials that you will find in a sewing basket among white people. There will be odds and ends of stitching materials, small strings, worn out bone awls, stones for sharpening the awls, periwinkle shells, bits of abalone shell, beads, soaproot brushes and other such articles too numerous to mention. Rattlesnake doctors even collected their rattlesnakes in them. They are one of the most useful utensils made by the Yokuts.

A twined burden basket is used for gathering acorns and for carrying all sorts of other materials. This basket is made in the shape of a cone, being pointed at the lower end, about two feet deep, and eighteen inches across the mouth. The lower point is generally reenforced by an extra layer of twining material, or a piece of buckskin. The twining of the basket is done in the same manner and the design is applied in the same way as in making the blackberry basket. They call this basket *ahng'-ush*.

[227] In gathering acorns the Indian women stand the ahngush against a log or tree, or place the point of the cone in a squirrel hole. The acorns are gathered and placed in another basket. They are then emptied into the burden basket. When the burden basket is filled it is placed in a string carrying-net much like a fish net, or it is supported upon the back of the Indian [482] woman only by means of a strap passed across her forehead. In some tribes the word for load, or burden, is *shaw'-nil*.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

The people who wanted to trade carried their things in baskets on their backs. They had to have their *Teah* (Te'-ah), chief with them. When they came up to trade they marched up in a straight line from each side. The Teah was in front.

When the two parties got close to each other they all took hold of the basket straps at the sides of their heads and swung from side to side, singing:

Ho-hoo'-hoo Yoo-'nah
(sung five times)
Hah-ha'

He-ke'-mah was the name of that song. That was the name of the trade too.

When the song was done each one took his basket down and spread his things on the ground in front of him. The rows of things were about ten feet apart. Then the trade started. The Teahs did all of the talking for their people. They talked to each other and agreed how much each could have. It was all done by rules.

Kahnte told me that his people used to trade off fish, *kots* [obsidian], salt grass salt, and some seeds. Sometimes they traded *kuts* (koots, soapstone) beads. They brought back shell beads and sea shells, *Traw'-neck* [abalone], *Cawm-sool* [clam], and *Caw'-sool* [olivella, or periwinkle]. Kahnte told me about a funny dried thing that one of his men got in a trade. I know now it was a star fish.

In the old days the Indians who lived by the lakes got their drinking water from the lakes. Around the edge of the lakes the water was muddy and hot. The Indian women used to take a basket and wade out into the lakes until the water was about four feet deep. Then they sunk the basket to the bottom upside down. Then they turned the basket over and filled it. The water at the bottom was lots cooler than on top and it tasted lots better, too.

Now Tulare Lake is dry. My old people told me that once it dried up a long time ago. The creeks all dried up too. My people had to go to their friends at the hills. Some of them went up Deep creek. They almost died before they got water about where Farmersville is now.

You ask me, "Will Tulare Lake ever fill up again?" I got only one thing to say. Yes. It will fill up full and everybody living down there will have to go away. I like to see that time myself. [it filled again in 1938]

5: Gayton E-5 (1925-1927) 1929

NS29 Yokuts NS29

Western Mono NS25

In the present instance the clay was obtained from a depression in an oak-covered meadow, which was saturated by seepage and which drained the near-by area. A digging stick was used to open up the ground and loosen it sufficiently for the potter to lift or pull out handfuls of the soil. She worked at a little ledge which permitted her to get at the earth some eighteen inches below the surface. At this level the soil carried a heavy admixture of sand. Proceeding downward the amount of sand grew less, and the potter began testing the viscosity of the soil by squeezing a lump in her hand. Finally, about two feet below the surface, she reached a pure clay with a slight admixture of sand which proved to be of satisfactory quality. The sand that came with the clay acted as tempering material. All informants agreed that binding material was rarely added: it was usually a matter of getting clay without too much sand and removing bits of rock, as in the present case. Occasionally sand was added, but no other tempering material was known.

The potter took out as much clay as she could carry. The amount manufactured six pots and two pipes (pl. 102), and a seventh small pot. In former times the clay was wrapped in an old deer skin and carried home in a carrying net.

Preparation of all clay consisted of kneading and pounding the material. This was done on a broad, flat portion of a bedrock mortar. Clay was never put in mortar holes in which food substances were ground. Before starting the potter selected a short, broad, roughly rectangular pestle for pounding the clay. (Other pestles, and the openings of food mortars, appear in the background of pl. 95*a*; the typical triangular food pestle is seen just beyond the basket in pl. 95*b*). Half the entire quantity of clay was put on the rock and pressed with the hands into a solid lump. The potter sat cross-legged before it, and picking it up and lifting it to shoulder level, beat it down upon the rock. This she continued for about ten minutes, turning the lump in her hands as she worked. The process solidified the mass of clay. The pestle was then taken up and pounded into the clay. This stage of the clay-working is shown in plate 95*a*. The flattened mass of material was continually turned inward at the edges. About ten minutes of pounding brought the clay into a highly viscous condition, so that the heavy substance adhered to the pestle and partly lifted off the mortar rock at the beginning of each upward stroke. The potter occasionally tested the condition of the clay by rolling out between her hands a rope of clay such as the vessels are built from (pl. 95*a*).